

New Trends in Narcotic Addiction Control

CATHERINE B. HESS, M.D., M.P.H.

FOR THE PAST 30 years any and all treatment programs for narcotic addicts have failed to "cure" any significant number. The reasons given for the high incidence of relapse are the same as those considered responsible for the addict's initial experimentation with drugs. They include the pharmacological and physiological properties of the addictive drug; the addict's personality, instability, and attitudes; sociocultural and environmental influences; and the availability of drugs and the methods of obtaining and using them.

Reasons for Addiction

Properties of addictive drugs. Addictive drugs produce in the addict desirable subjective effects, enabling him to escape from problems, be relieved of anxiety and fears, and capture new experiences—experiences which propel him toward happiness and satisfactions as he goes through life on a day-to-day basis.

Characteristics of the addict. Results of various studies show the addict to have the whole spectrum of personality characteristics, ranging from the normal personality to the neurotic, the psychotic, the psychopathic, and the sex deviate. Certain personality traits, however, seem conducive to development of addiction. Low tolerance for anxiety, pain, distress, discomfort, and for frustration occurs with regularity among addicts. Although many addicts show personality disorders, only 7 to 10 percent have been diagnosed as psychopathological. The addict demonstrates emotional

instability, immaturity, impulsiveness, defensiveness, unreliability, and deception (he offers endless excuses for his actions to himself, his family, and his community).

Sociocultural, environmental influences. Addicts come from every stratum of society and include the medically addicted patient and members of the medical profession. The communities loaded with addiction, however, are the overcrowded and underprivileged ones in which numerous families are on welfare, a majority of the homes are broken, education is at the lowest level, and the school dropout rate is the highest. Nevertheless, addicts using all kinds of drugs, alcohol, and marihuana for kicks are currently increasing in the well-to-do adolescent group. Addiction can no longer be considered a class-bound phenomenon.

Other factors. Other factors in addiction include the availability of drugs and the methods of obtaining and using them. These procedures create a behavioral pattern which is repeatedly reinforced by the euphorogenic effects of the drug and the resultant alleviation of anxiety. Once a person becomes physically dependent on a drug, a new powerful force dominates his behavior because of his fear of onset of the withdrawal syndrome.

All these factors are visible at all times on the addict's horizon. When the addict is "clean"—not using drugs—these forces and images continue to be apparent at every turn and exert a magnetic force which results in his return to drugs.

A major crucial question has not yet been answered. Are there physiological, metabolic, biochemical, or psychological attributes which make certain persons exposed to use of drugs more susceptible to returning to their use? Conversely, are there attributes which militate against the development of addiction in those

Dr. Hess, a former assistant commissioner, addictive disease control services, New York City Department of Health, and narcotics coordinator for the City of New York, is now assistant chief of program planning, Cancer Control Branch, Chronic Disease Division, Public Health Service.

similarly exposed? Does some trigger situation—some conditioned stimuli associated with previous drug-seeking activities—return the addict to drug use again?

Routine Approaches to Treatment

If the answers to these questions are affirmative, our approach to treatment can become better defined and structured. In spite of innumerable scientific studies on narcotic addiction, many gaps remain which set the stage for all kinds of proposals and solutions. These proposals represent two extremes: (a) take the addict off the street by compulsory commitment to either a hospital treatment center or a correction treatment center for periods of 6 to 7 years; (b) keep all addicts voluntarily in a community setting and establish treatment centers supplying free drugs, a measure which, it is argued, would automatically eliminate the addict's practice of stealing and robbing to support his habit.

It is evident that these oversimplified approaches rest on many basic fallacies. The role of the police, as opposed to the role of the physician, in this new chronic disease of addiction is misunderstood by a great many people. The need for strict control of narcotic traffic is so essential that no medical program can succeed without it. What impact will curing a few addicts make if an area is continually flooded with an overabundance of drugs! If the 50,000 addicts in New York City could be simultaneously hospitalized, imprisoned, or moved to treatment colonies within 24 hours, a new group would start taking their place the next day if drugs remained available. Since 75 percent of the addict population are themselves pushers from time to time, it is obvious how and why the disease is spreading. This spread must be controlled through Federal, State, and local enforcement agencies.

Maintenance Treatment Programs

Statements in the press, on the radio and TV, and the introduction of various bills in the New York State Legislature have led a large segment of the public to believe that the solution of the addiction problem lies in giving the addict his heroin free. Reference is made to "the successful British system." But how can

a program be called successful when the addicted population has doubled in the past 10 years? In addition, it has been shown that 35 percent of a study group in England became involved in crime within a year.

I. M. Frankau, London, England, who several years ago was a firm supporter of supplying drugs to addicts, now states that attempting to treat addicts is a complete waste of time unless they are persons without previous criminal records and are gainfully employed. She now accepts only patients who agree to eventual withdrawal from narcotic drugs.

Heroin is an undesirable drug to use in any maintenance program for several reasons.

1. Because of the tolerance to the drug that the addict develops, he requires increasing dosage each month.

2. Since heroin is short acting, a shot is required every 4 to 6 hours.

3. Because withdrawal symptoms are immediate and marked, the addict has to adhere to a rigid schedule of shots.

4. The period of "nodding" following an injection so incapacitates the person for varying intervals of time thereafter that the majority of addicts find it impossible to hold a job while using heroin.

5. Heroin has been an illegal drug in the United States since 1925.

These limitations about heroin do not mean that scientific demonstrations of maintenance programs should not be tried with more acceptable drugs. Hopefully, such programs would include the use of several drugs and in more than one setting. Only on the basis of valid research findings can we consider the feasibility of a mass approach to actual treatment. Caution must be exercised continually lest a desire to come too rapidly to a panacea cause us to ignore other important aspects of addiction. We must never forget that addiction is a three-pronged problem—medical, social, and legal.

New Approaches to Treatment

New approaches in treatment and habilitation of the narcotic addict must include provision of sufficient support and help for him to develop socially acceptable forms of behavior with which to replace his old forms of hustling,

living in undesirable infested quarters or jail, eating inadequate food, and functioning in antagonistic interrelationships in the community.

If addicts could be protected by some agent against the effects of narcotic drugs—against the subsequent development of tolerance to them and psychological and physical dependence on them—at least the physiological factors contributing to relapse could to a great extent be eliminated. In the past several years, several drugs have been discovered which fulfill these requirements.

The first drug, cyclazocine, has been used at the Public Health Service Hospital, Lexington, Ky., for the past 2 years. Martin and associates (1) suggested that cyclazocine, a long-acting orally effective narcotic antagonist in the benzomorphon series, could be used for the ambulatory management of addicts who are highly motivated to stay off drugs. The addict is first detoxified in a hospital setting and then established on cyclazocine, beginning with an oral dose twice daily of 1 mg. per 70 kg. of body weight. Within 2 to 6 weeks, dosage is increased to 2 mg. per 70 kg. twice a day. Daily maintenance on this drug provides protection against the euphorogenic actions of morphine, removes any dependency factor, and eliminates contact with stimuli associated with the addict's former habits. This long-acting medication is capable of controlling the pharmacological factors which are thought to be responsible for most of the addiction. Tolerance develops to cyclazocine's subjective effects, but not to its ability to antagonize many of the pharmacological actions of morphine.

The other drug under consideration for a maintenance program is methadone. In small doses of 20 to 30 mg. daily, this medication has been used for many years to detoxify narcotic addicts. Within the past 2 years, two clinics in Canada have begun using methadone as a substitute for heroin. The Narcotic Addiction Foundation of British Columbia in Vancouver, in its third year of operation in 1965, had 71 addicts receiving 45 mg. of methadone daily.

In Toronto, a clinic of the Alcoholic and Drug Addiction Research Foundation of Canada has operated a narcotic maintenance unit using methadone since January 1964. The program

concentrates on activities for the addicts and provides counseling, occupational therapy, physical recreational therapy, group sessions, and individual therapy. The activities carried out are structured by the addict and his needs and not by the treatment personnel. The activity program operates while the addict is on a maintenance dose of 10 mg. of methadone three times daily. The older addict receives 5 mg. twice daily. To date this form of treatment has been offered to 20 addicts, 17 of whom are carrying on satisfactorily in their environment.

Currently in New York City, under the direction of Dr. Vincent Dole, the narcotics research unit at the Manhattan General Hospital, a division of Beth Israel Hospital, is using daily oral doses of 100 to 200 mg. of methadone. This high dosage creates a blocking mechanism so that the addict experiences no reaction to a superimposed heroin shot. To date, 65 addicts have been hospitalized, detoxified from their usual heroin level, and placed on methadone maintenance. At the end of 6 weeks they enter the second phase, in which they live in the community and return to the hospital once daily for medication. Other supportive services are similar to the Toronto program. In the third phase, the former addicts become active participating citizens in their communities.

Preliminary results of all these programs seem to indicate that cyclazocine or methadone will control the pharmacological factors which are thought to be responsible for the compulsive drug-seeking activities of narcotic addicts and for producing the discouraging "revolving door" syndrome. Nevertheless, many sociological needs of the addict also must be met. An active, directive therapeutic approach is needed, one which reaches out to the addict and focuses on an activity program in which his entire day is programed. While the addict is being treated, he must have adequate living quarters, and continued efforts must be made to integrate him into the community as an acceptable citizen. He needs to be afforded opportunities to finish his education and to develop working skills at his own pace and level of desire.

Halfway houses. Since socioeconomic factors, as well as pharmacological ones, contribute to drug addiction, control of socioeconomic factors may also aid in reducing drug addiction.

The old conservative programs of drug control have failed in most cases because, after the addict's detoxification in a hospital, he has been discharged to live again in his old environment without a transition period in secure, clean living quarters. Lack of funds and experience have hampered both voluntary and official agencies in developing halfway houses for drug addicts. Nowhere in the United States is there currently a halfway house established exclusively for male narcotic addicts. One such house for female addicts, the Village Haven, has been in operation for 1 year in New York City. Along with voluntary agencies, the city and State of New York plan, however, in the near future, to support six such residences for men and women addicts.

Synanon Foundation, Inc. Synanon Foundation, Inc. (2), begun 6½ years ago by Charles E. Dederich, is a private foundation operating on fees paid by the residents of the foundation's drug addiction treatment houses and also supported by contributions from friends. Synanon Houses are located in Connecticut and California.

The Synanon staff act on the premise that the addict's behavior shows he is stupid and emotionally stunned. An environment is therefore created in which the addict can grow up again and learn the basic principles of adult behavior. Because the Synanon staff discovered the effectiveness of having people help each other kick the habit by "cold turkey," they have former addicts serve as models of adult behavior. These treatment procedures are incorporated into the current program.

To date approximately 500 men and women have resided in Synanon Houses. The program includes a population at the Nevada State Prison. Since experience demonstrated that 2½ years of residence was required to effect any permanent change in the addict's personality, each person is urged to stay in the program 2½ years.

Of the 104 persons who have stayed at Synanon Houses 2 years or longer, 65 currently remain on the staff of Synanon, Inc., 26 are living outside in their communities, and 13 have split away from the program. Thus, of the 500 who entered the program, only 5 percent stayed 2 years or longer and are now living and working in their communities as drug-free citizens.

Daytop Lodge—Staten Island. Daytop Lodge is a program in New York City for 30 male drug addicts administered by the Supreme Court of New York State, Second Judicial District of Kings County, with funds from the National Institute of Mental Health, Public Health Service. The majority of the 30 addicts are on probation. Similar to the Synanon program, Daytop Lodge operates on the general thesis that addicts are emotionally immature and that a person grows by learning new ways to handle stress situations. Former addicts run the program, using the techniques of group encounter and daily seminars. In these group situations the addict can entertain new thoughts and deal with abstract concepts. The meetings provide him with the opportunity to dissipate unreal fears. An internal status system is developed and used as a guide for achievement and punishment. This system establishes a pattern whereby the addict learns that only good behavior brings rewards. He is taught that the world does not owe him anything and that he must work for what he wants. The work starts with menial tasks and ascends to positions of responsibility.

Parole-probation approach. In 1960 staff of the special narcotic project of the New York State Division of Parole described results of a 3-year study of 344 parolees with a history of drug addiction. They had been under supervision of a specially trained group of officers with small caseloads. Of these parolees, 119 (35 percent) had never been declared delinquent for any reason including drugs.

In 1963 another investigation was begun of all 695 persons with histories of drug addiction who had been under parole supervision at any time between November 1, 1956, and December 31, 1961. These 695 persons, of course, included the 344 parolees of the 3-year study. In contrast to that study, a 1-year observation period was built into the research design so that the adjustment of parolees as of December 31, 1962, could be evaluated.

The results revealed that, of the 695 parolees studied, 185 (27 percent) had either successfully completed their parole or were still under supervision without any violations as of December 31, 1962. Those in good standing as of that date had been on parole for at least 1 year.

In addition, there were 62 parolees who, although guilty of other violations, had never relapsed to drug addiction again while under supervision. If we add these 62 to the 185 completely successful parolees, then 247 (36 percent) of all parolees supervised in this period of 6 years and 2 months were never involved in drugs. The median length of supervision for the successful parolees was 16 months.

These results indicate that a parole program with judicious use of authority holds more promise than any voluntary approach to date.

In keeping with this approach, recommendations of the Mayor's Temporary Commission of New York City on Narcotic Addiction, released in December 1965, included involuntary civil commitment and compulsory treatment for all addicts either imprisoned or on parole or probation. The commission recommends that, because an addict is both a danger to himself and to others, an emergency 15 days' civil commitment procedure be created. During this period, the State's narcotic coordinator must evaluate the case and start procedures, if indicated, for compulsory treatment up to a maximum of 3 years.

Conclusion

Narcotic addiction—a multifaceted, contagious chronic disease involving physical, psychiatric, and social aspects—has not responded to traditional therapeutic approaches. But new concepts are being explored which, hopefully, may produce a significant change in the addiction rate. A sizable decrease, however, does not seem possible under the present fragmented approach of voluntary and official programs. Habilitation programs must include halfway houses, day-care centers, vocational training, and job-procurement stations if they are to be effective and meaningful. We must focus attention on prevention and persuade professionals and the general community of the need for early identification of addict-prone persons and of the importance of providing service for them as a group. All major efforts will be directed along these lines in New York City in the immediate future.

Summary

Drug addiction has proved most unresponsive to traditional therapy. Contributing to the low cure rate are the complexities related to the pharmacological and physiological properties of addictive drugs, the personality and attitudes of the addict, the environmental influences at work on him, and the ritual involved in obtaining and using drugs. Treatment approaches have ranged from the extremes of civil commitment for all addicts in California to the supplying of narcotic drugs to addicts in England. The British approach of supplying drugs, including heroin, has not been as successful as early reports indicated. Heroin use necessitates injections every 4 to 6 hours, and the addict develops increasing tolerance to it; moreover he cannot work while using heroin.

There are drugs, however, that can be used in maintenance programs which permit the addict to function normally on one oral dose per day. Programs using either cyclazocine or methadone are functioning in Vancouver and Toronto, Canada, and in Lexington, Ky., and New York City. Supplying one of these medications would probably eliminate the need to steal and rob to support the addiction habit.

New approaches to treatment must include halfway houses, day-care centers, vocational training, and job placement. In addition, new techniques of group therapy may be practiced in living situations such as those afforded by the Synanon Houses in California and Daytop Lodge in New York. Even with these new approaches, however, the cure rate remains around 5 percent. Best results seem to be attained in a setting of parole and probation. Under parole and probation supervision, 27 percent of 695 subjects remained drug free and without violations according to a recent New York State investigation.

REFERENCES

- (1) National Academy of Science, National Research Council: Report of Committee on Drug Addiction and Narcotics, Washington, D.C., 1965, p. 4289.
- (2) Yablonsky, L.: *The tunnel back*. Macmillan and Co., Ltd., 1965.